Artificial Sweeteners might not be a Healthy Substitute to Regular Sugar

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On September 6, 2019, Andrew Jacobs, a New York Time reporter, published an article "Death by Diet Soda?", in the Health and Science section of The New York Times. Jacobs (2019) studied a research published by Mullee et al. (2019) where the data presented showed that artificially sweetened drinks caused 26% more premature deaths compared to sugar free beverages. This study made Jacobs (2019) ask the question, if drinking Coca-Cola Classic is even more deadly compared to Diet Coke. It is a widespread accepted fact in the scientific community that drinking sugary drinks do cause many health problems as well as premature deaths, however, the concept that artificial sweeteners are as much as harmful, if not, even more harmful, caught both general public and many other researchers in this field by surprise. Jacobs (2019) wrote in his article that the study of Mullee et al. (2019) had brought widespread anxiety and raised the question, whether or not artificial sweeteners are as harmful for the human body as regular sugar.

In the study done by Mullee et al. (2019), they asked the question if consuming sugarsweetened drinks regularly can cause greater health problems and lead to premature deaths. They discovered that both sugar-sweetened and artificially sweetened beverages come with a higher health risk and is a profound cause of mortality. The study which was undertaken for over 16 years and gathered data on more than 450,000 individuals, showed that it is vital that there should be a limit to the individual consumption of soft drinks. Other researches cited by Jacobs (2019) showed that similar studies show correlation between sweetened soft drinks and higher rate of premature deaths. It is a fact that SSBs or Sweetened-Soda-Beverages are one of the leading factors to obesity, stroke, heart diseases and all-cause early-age mortality (Mossavar-Rahmani, 2019). Furthermore, Mullee et al. (2019) showed through their data that there is a positive correlation between artificial sweeteners containing beverages and deaths occurred from circulatory diseases. Through the studies, Jacobs (2019) reported the question, "Does guzzling diet soda lead to an early demise?". When most of the people chooses artificial sweeteners to avoid all the health effects of regular sugars, the idea that artificial sweeteners can also be harmful, is surely to raise anxiety in the general public.

Many of the current generation chooses the "diet" beverages as form of substitute to their relative sugar-sweetened drinks, believing that the artificially sweetened beverages are less or not at all harmful for their health. These drinks not only contain soda beverages such as Diet Coke or Sprite Zero, but also the highly consumed coffee drinks where many prefer to add Splenda or Sweet & Low, rather than pure sugar. When the study of Mullee et al. (2019) published, it showed that even the artificial sweeteners are not safe for consumption, as a result, it created a widespread distress as Jacobs (2019) put in his article, "drinking Diet Coke could be even more deadly than drinking Coca-Cola Classic". To get more details Jacobs (2019) interviewed experts on this field and found that many speculates that artificial sweeteners might or might not be directly associated with premature deaths, as some of them believe that those of choose "diet" soda beverages live a lifestyle that may contribute to the early death, furthermore, people who use artificial sweeteners may become more prone to eating other unhealthy foods since they had a unsweetened drink, as portrayed by a researcher at Harvard T.H. Chan School of Public Health, Vasanti S. Malik, cited by Jacobs (2019) in his article. Moreover, according to a nutritionist at the University of North Carolina, Dr. Barry M. Popkin, that currently there is a lack of data to prove a correlation between those who not only consume artificial sweeteners but also lead a proper and healthy lifestyle (Jacobs, 2019). As a result, these sources and studies portray that it is very difficult to find a conclusion to this dilemma with our current knowledge and further research is required.

However, the experiments needed to correlate the finding of Mullee et al. (2019) directly to artificial sweeteners, create an ethical dilemma as it requires a clinical study where it becomes ethically concerning as thousands of people need to participate in a study of consuming artificially sweetened beverages for ages that has a possibility to lead those people to premature deaths. Jacobs (2019) wrote, "a clinical trial that randomly assigns participants to a sugary drinks group or a diet soda group — isn't feasible" as he considers both the expense and ethical concerns on clinical trials on humans. This direct form of study is where the argument comes to a fix since, no conclusion can be drawn to evaluate the health effects of artificial sweeteners. As it is very unlikely to create a controlled environment to conduct the effect of artificial sweeteners, other areas have to be explored. Jacobs (2019) explored another way of conducting the study, by observing and recording data on those who use artificial sweeteners as sugar substitutes in their daily drinks willingly, even though, this will bring in more variables such as lifestyle choices, genetic disorders etc. and can make the study more difficult and very lengthy as portrayed by the study conducted by Mullee et al. (2019).

In conclusion, Jacobs (2019) feared that these studies can lead to a misunderstanding among the populace as he cited the founding director of Healthy Food America, Dr. Jim Krieger, who commented that, "new study (study of Mullee et al. (2019)) and others like it raise more questions than they answer". For a paradigm shift to happen on the prospect of artificial sweeteners, more concrete research is required as well as there is a need for a better communication platform to be established between the scientific community and the general public through for example, the government, which can ensure that there is a limitation in the consumption of sugary beverages. Citation:

- Jacobs, A. (2019, September 6). Death by Diet Soda? Retrieved from https://www.nytimes.com/2019/09/06/health/diet-soda-health-death.html
- Mullee A, Romaguera D, Pearson-Stuttard J, et al. Association Between Soft Drink Consumption and Mortality in 10 European Countries. JAMA Intern Med. Published online September 03, 2019. doi:10.1001/jamainternmed.2019.2478
- Mossavar-Rahmani Y, Kamensky V, Manson JE, Silver B, Rapp SR, Haring B, et al.. Artificially sweetened beverages and stroke, coronary heart disease, and all-cause mortality in the Women's Health Initiative.Stroke. 2019; 50:555–562. doi: 10.1161/STROKEAHA.118.023100